



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,486	02/20/2004	William Christopher Edwards	LAR 16324-2	2124

23351 7590 08/08/2005

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
LANGLEY RESEARCH CENTER  
MAIL STOP 141  
HAMPTON, VA 23681-2199

EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT PAPER NUMBER

2636

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



### **DETAILED ACTION**

1. This Office action is in response to Applicant's response filed December 09, 2004 and April 08, 2005. Claim 1 has been amended. No claims have been canceled, or added.
2. Terminal disclaimer filed December 09, 2004 have been approved. Double patenting rejection has been overcome.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 102***

4. Claims 1-2, 2-12, 14-22, and 24-46 are again rejected under 35 U.S.C. 102(e) as being anticipated by Flanagan et al. (US 2003/0062996).

#### **Claim 1:**

Flanagan discloses a system comprising:

- a. a transmitter 30 for transmitting at least one encoded wireless signal, the at least one encoded wireless signal having a predetermined range of transmission;
- b. means 20, operatively coupled to the transmitter, for detecting the presence of at least one object in a position;

Art Unit: 2636

- c. means 502, operatively coupled to the detecting means, for activating the transmitter to generate the at least one encoded wireless signal when the presence of the at least one object is detected;
- d. a receiver 40, remotely located with respect to the transmitter, capable of sensing the at least one encoded wireless signal when the receiver is within the predetermined range of transmission; and
- e. a receiver controller coupled to the receiver and having a timing function, the timing function timing to a time interval wherein, at the completion of each time interval, the receiver controller (i) repeats the timing function when the at least one encoded signal is sensed by the receiver or (ii) issues an alarm signal when the at least one encoded signal is not sensed by the receiver.

See para. 1022, 1024, and 1026.

Claim 2:

The at least one encoded wireless signal in Flanagan is an RF signal.

Claim 4:

The switch 22 comprises at least one pressure switch. See para. 0042.

Claim 5:

The system of Flanagan's further comprises means, operatively coupled to the receiver controller, for communicating an alarm when the receiver controller issues an alarm signal.

Claim 6:

In Flanagan, the communicating means comprises an audio output 44 for generating at least one audio output in response to the alarm signal.

Art Unit: 2636

Claim 7:

The communicating means further comprises a second means 46, operatively coupled to the activating means, for generating an audio output when the detecting means senses that the at least one object is in the position.

Claim 8:

The receiver controller in Flanagan further comprises a replaceable source 914, 916 for supplying power to the receiver, the receiver controller, the at least one receiver controller and the means for generating a first and second alarms.

Claim 9:

The activating means further comprises a replaceable source 514,515 for supplying power to the transmitter, the detecting means, and the activating means.

Claim 10:

In Flanagan, the at least one object is a child.

Claim 11:

Flanagan discloses a safety apparatus comprising:

- a. a child safety seat (see front page figure)
- b. a transmitter 30 for transmitting at least one encoded wireless signal, the at least one encoded wireless signal having a predetermined range of transmission;
- c. means 20, operatively coupled to the transmitter, for monitoring the presence of at least one object in a position;

- d. means 502, operatively coupled to the detecting means, for activating the transmitter to generate the at least one encoded wireless signal when the presence of the at least one object is detected;
- e. a receiver 40, remotely located with respect to the transmitter, capable of sensing the at least one encoded wireless signal when the receiver is within the predetermined range of transmission; and
- f. a receiver controller coupled to the receiver and having a timing function, the timing function timing to a time interval wherein, at the completion of each time interval, the receiver controller (i) repeats the timing function when the at least one encoded signal is sensed by the receiver or (ii) issues an alarm signal when the at least one encoded signal is not sensed by the receiver.

See para. 1022, 1024, and 1026.

- g. means 46, operatively coupled to the receiver controller, for communicating an alarm to the caregiver when the receiver controller issues an alarm signal.

Claim 12:

The at least one encoded wireless signal in Flanagan is an RF signal.

Claim 14:

The switch 22 comprises at least one pressure switch. See para. 0042.

Claim 15:

In Flanagan, the communicating means comprises an audio output 44 for generating at least one audio output in response to the alarm signal.

Claim 16:

The communicating means further comprises a second means 46, operatively coupled to the activating means, for generating an audio output when the detecting means senses that the at least one object is in the position.

Claim 17:

The receiver controller in Flanagan further comprises a replaceable source 914, 916 for supplying power to the receiver, the receiver controller, the at least one receiver controller and the means for generating a first and second alarms.

Claim 18:

The power source in Flanagan is a replaceable source.

Claim 19:

The activating means further comprises a replaceable source 514,515 for supplying power to the transmitter, the detecting means, and the activating means.

Claim 20:

The power source for the transmitter in Flanagan is a replaceable source.

Claim 21:

Flanagan discloses a system comprising:

- a. a transmitter 30 for transmitting at least one encoded wireless signal, the at least one encoded wireless signal having a predetermined range of transmission;
- b. means 20, operatively coupled to the transmitter, for detecting the presence of at least one object in a position;

Art Unit: 2636

- c. means 502, operatively coupled to the detecting means, for activating the transmitter to generate the at least one encoded wireless signal when the presence of the at least one object is detected;
- d. a receiver 40, remotely located with respect to the transmitter, capable of sensing the at least one encoded wireless signal when the receiver is within the predetermined range of transmission
- e. a receiver controller coupled to the receiver and having a timing function, the timing function timing to a time interval wherein, at the completion of each time interval, the receiver controller (i) repeats the timing function when the at least one encoded signal is sensed by the receiver or (ii) issues an alarm signal when the at least one encoded signal is not sensed by the receiver  
(See para. 1022, 1024, and 1026.)
- f. means 44, 46, operatively coupled to the receiver controller, for communicating an alarm to the caregiver when the receiver controller issues an alarm signal.

Claim 22:

The at least one encoded wireless signal in Flanagan is an RF signal.

Claim 24:

The switch 22 comprises at least one pressure switch. See para. 0042.

Claim 25:

In Flanagan, the communicating means comprises an audio means 44 for generating at least one audio output in response to the alarm signal.

Claim 26:



The communicating means further comprises a second means 46, operatively coupled to the activating means, for generating an audio output when the detecting means senses that the at least one object is in the position.

Claim 27:

The receiver controller in Flanagan further comprises a replaceable source 914, 916 for supplying power to the receiver, the receiver controller, the at least one receiver controller and the means for generating a first and second alarms.

Claim 28:

The power source in Flanagan is a replaceable source.

Claim 29:

The activating means further comprises a replaceable source 514,515 for supplying power to the transmitter, the detecting means, and the activating means.

Claim 30:

The power source for the transmitter in Flanagan is a replaceable source.

Claim 31:

Flanagan discloses a safety apparatus comprising:

- a. means 20 for monitoring the presence of a child in a child seat; and
- b. means, operatively connected to the monitoring means and configured to have first portion 22 affixed to the child seat and a second portion 40 configured to be maintained in the possession of a caregiver to the child, for wirelessly tethering caregiver of the child to the child seat, wherein the wireless tethering means 30 is self-activated when the monitoring means 20 first senses the presence of the child in the child seat and

Art Unit: 2636

wherein the wireless tethering means communicates an alarm to the caregiver when the caregiver ventures beyond a predetermined distance from the child seat without having removed the child from the child seat.

Claim 32:

The wireless tethering means 30 is deactivated when the child is removed from the child seat. That is, when the child seat sensor no longer senses the child in the child seat.

Claim 33:

In Flanagan the alarm communicated to the caregiver is deactivated when the child is removed from the child seat.

Claim 34:

In Flanagan the alarm communicated to the caregiver is deactivated when the caregiver returns to a position within the predetermined distance to the child seat.

Claim 35:

In Flanagan, the alarm communicated to the caregiver and the wireless tethering system is deactivated when the child is removed from the child seat.

Claim 36:

In Flanagan, the alarm communicated to the caregiver is deactivated when the caregiver returns to a position within the predetermined distance to the child seat.

Claim 37:

The first portion of the wireless tethering means comprises a transmitter 30 and the second portion of the wireless tethering means comprises a receiver 40 that are operatively coupled to one another.

Claim 38:

The rejection of claim 38 recites the rejection of claim 1, except it is a method claim.

Claim 39:

The Flanagan system deactivates the alert system when the child is removed from the pressure sensitive position.

Claim 40:

The Flanagan monitors the pressure sensitive position to detect the presence or absence of the child once the alert system is activated.

Claim 41:

The step for monitoring the pressure sensitive position in Flanagan comprises the act of sensing the weight present in the position.

Claim 42:

The step for communicating an alarm in Flanagan comprises the act of sending an audible sound 44 to the caregiver.

Claim 43:

In Flanagan the step for communicating an alarm comprises the act of sending a tactile vibration to the caregiver. See para 0045.

Claim 44:

In Flanagan when the child is removed from the pressure sensitive position the alarm to the caregiver is inactivated.

Claim 45:

The system in Flanagan inactivates the alarm to the caregiver when the caregiver returns within the predetermined range of the signal.

Claim 46:

The rejection of claim 46 recites what was discussed in the rejection of claim 31, except it is a method claim.

***Claim Rejections - 35 USC § 103***

5. Claims 3, 13, and 23 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagan et al. (US 2003/0062996).

Claim 3:

The detecting means 20 comprises at least one switch 22 to detect the presence of an object. See para. 0042.

It is not clear whether the switch is in open or closed position when the object is not in the position. However, the way the switch is wired into the system as either normal open or closed would not be considered an inventive step because it is merely a choice in design.

Claim 13:

The rejection of claim 13 recites what was discussed in the rejection of claim 3.

Claim 23:

The rejection of claim 23 recites what was discussed in the rejection of claim 3.

*Applicant's Arguments*

6. The applicant has contended that the invention was prepared and submitted to the NASA Langley Research Center Patent Counsel Office before September 28, 2001 and attached exhibit A.

*Response to Applicant's Arguments*

7. Applicant's arguments have been fully considered but they are not persuasive because the dates are blocked off, there is not enough evidence to show that the invention was submitted before September 28, 2001.

*Conclusion*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2636

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-572-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long horizontal flourish extending to the right.

Julie Lieu  
Primary Examiner  
Art Unit 2636

Jul 31, 05